

Sefika Burcak Polat¹, Dilek Arpaci², Aylin Kilic Yazgan³, Husniye Baser¹, Mehmet Kilic⁴, Reyhan Ersoy¹, Bekir Cakir¹

¹Yildirim Beyazıt University, Ataturk Education and Research Hospital, Endocrinology and Metabolism Department, Bilkent, Ankara, Turkey

²Karaelmas University Hospital, Endocrinology and Metabolism Department, Zonguldak, Turkey

³Yildirim Beyazıt University, Ataturk Education and Research Hospital, Pathology Department, Ankara, Turkey

⁴Yildirim Beyazıt University, Ataturk Education and Research Hospital, General Surgery Department, Ankara, Turkey

OBJECTIVE

- Neoplasms of the thyroid gland are classified according to the cell that it originates and commonly they originate from follicular cells.
- The most common differentiated thyroid cancers (DTC) are papillary and follicular carcinomas.
- Coexistence of two different histological types of primary follicular thyroid neoplasm is a rare condition.
- There are previous reports of concomitant medullary and papillary thyroid cancers. However there is scarce data about the simultaneous occurrence of the two different histological types of primary follicular thyroid tumors and this is the first study on that subject

METHODS

- From January 2007 to September 2014, our institutional database was reviewed for patients who underwent thyroid surgery for various indications.
- Medical records and cytopathology reports of those patients were examined retrospectively. Simultaneous neoplasms of follicular origin were noted

RESULTS

- A total of 3700 patients were operated. Histopathological examination result was benign in 2686 (73%) patients while it was malignant in 1014 (27%) patients.
- Among the patients with the diagnosis of DTC only 20 (1.9%) had accompanying second neoplasia within the same thyroid gland.
- PTC had thyroid capsule invasion in seven patients (35%) while capsule was intact in thirteen (65%).
- In seventeen (85%) patients there wasn't vascular invasion whereas in three patients (15%) vascular invasion was detected in PTC. Second neoplasm was follicular carcinoma in 10 patients, Hurthle cell carcinoma in 2 patients, Hurthle cell adenoma in 5 patients and follicular adenoma in 3 patients

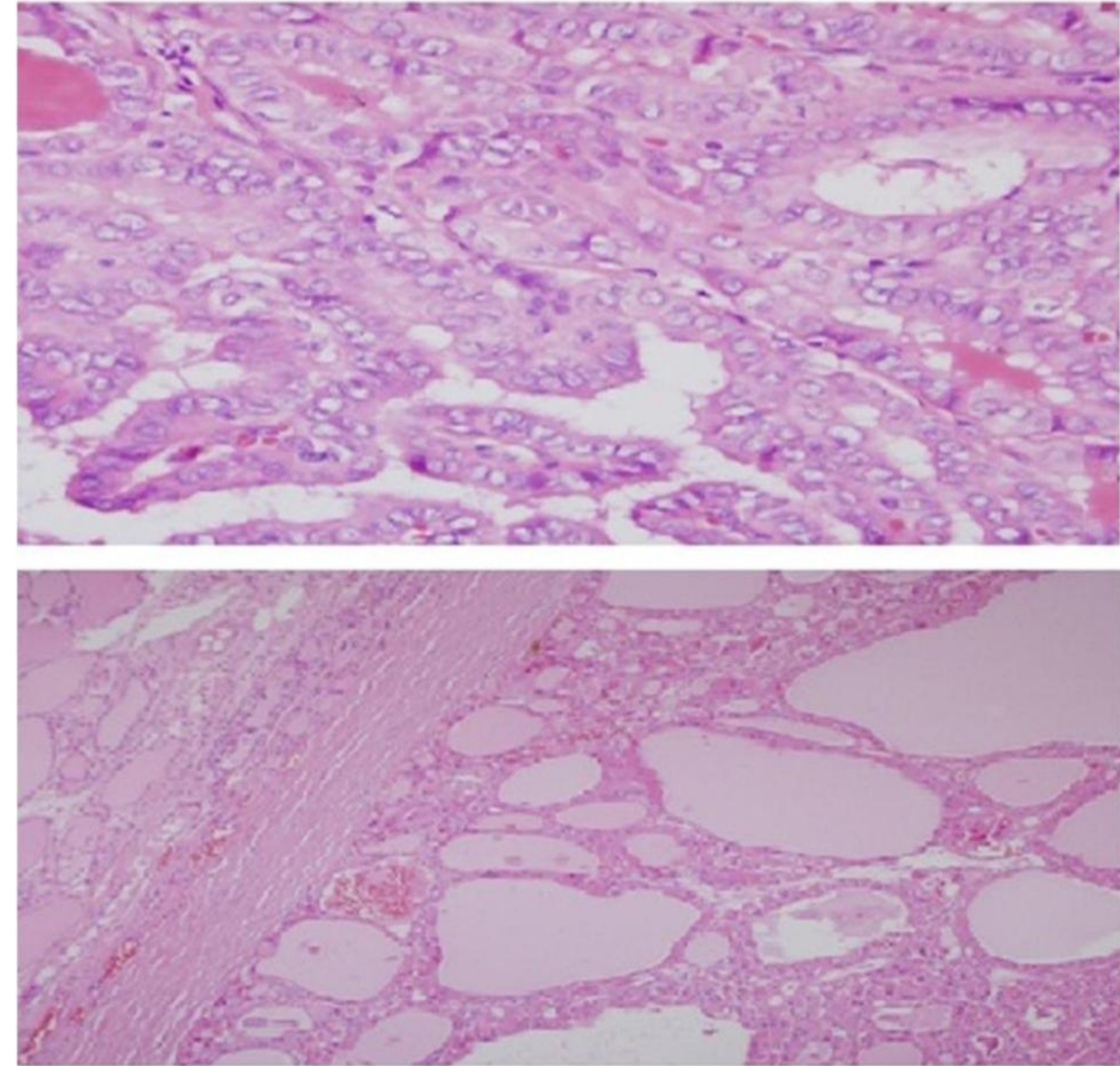


Figure 1: papillary cancer and Hurthle cell adenoma cooccurrence in a patient

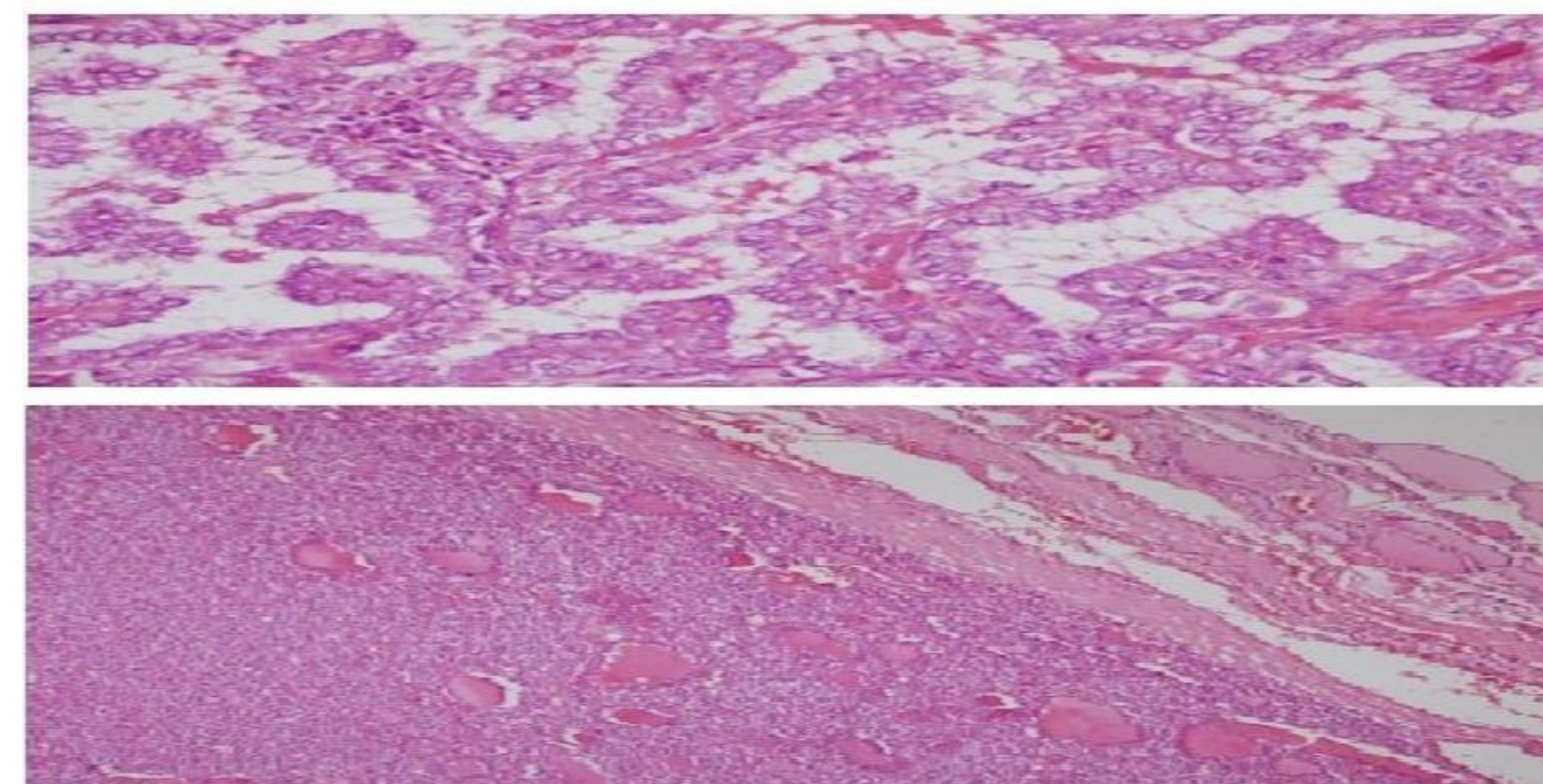


Figure 2: Papillary cancer and follicular adenoma coexistence

CONCLUSION

- Such simultaneous tumors may be part of a familial tumor syndrome or an unidentified novel gene mutation playing role in the pathogenesis of more than one type of tumor. Based on the current evidence the synchronous occurrence of those neoplasms in a given patient is likely coincidental in the literature. Further study is required using a larger patient population with standardized genetic chara

